Filing Date: December 31, 2003

Title: COMPONENT PACKAGING APPARATUS, SYSTEMS, AND METHODS

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IN THE CLAIMS

- 1. (Original) An apparatus comprising:
 - an embossable substrate mixture that includes a polymer and a release agent.
- 2. (Original) The apparatus of claim 1, further including:
- a substrate base, wherein the embossable substrate mixture is a film over the substrate base and is embossed.
- The apparatus of claim 2, wherein the embossable substrate mixture is a film over 3. (Original) a Mylar film that is attached to the substrate base.
- The apparatus of claim 1, wherein the embossable substrate mixture polymer 4. (Original) comprises:
 - an epoxy resin; and
 - a hardening agent.
- 5. (Original) The apparatus of claim 4, wherein the release agent comprises carnauba wax.
- The apparatus of claim 5, further comprising: 6. (Original)
 - metal wiring deposited in embossed grooves of the embossable substrate mixture; one or more electronic chips coupled to the metal wiring; and one or more external electrical connections coupled to the metal wiring.
- 7. (Original) The apparatus of claim 6, wherein the one or more electronic chips attached to the metal wiring includes a computer processor; the apparatus further comprising:
 - a memory operatively coupled to the processor;
 - an input system and an output system operatively coupled to the processor;
 - a power supply operatively coupled to the processor; and

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an enclosure holding the processor, the memory, the input system, the output system, and the power supply.

- 8. (Original) The apparatus of claim 1, wherein the release agent comprises one or more components selected from the group consisting of montanic acid, stearic acid, myristic acid, and combinations thereof.
- 9. (Original) The apparatus of claim 1, wherein the release agent comprises one or more components selected from the group consisting of fatty acid glycol esters, polyethylene glycol esters, laurate ester and combinations thereof.
- 10. (Original) The apparatus of claim 1, wherein the release agent comprises one or more components selected from the group consisting of microcrystalline wax, urethanized microcrystalline wax and oxidized microcrystalline wax and combinations thereof.
- 11. (Original) The apparatus of claim 1, wherein the release agent comprises one or more components selected from the group consisting of polyethylene waxes, urethanized polyethylene and oxidized polyethylene wax and combinations thereof.
- 12. (Original) The apparatus of claim 1, wherein the release agent comprises one or more components selected from the group consisting of low-molecular-weight branched polyethylene, oxidized low-molecular-weight branched polyethylene, silicone, amino functional polydimethylsiloxanes, and combinations thereof.
- 13. (Original) The apparatus of claim 1, wherein the substrate mixture comprises: methyl ethyl ketone;

digylcidyl Bisphenol-A;

tetrabromo Bisphenol-A;

ortho-cresol novolak epoxy resin;

epoxy-terminated polybutadiene rubber;

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brominated phenolic novolak resin;

2,4-diamino-6-(2-methyl-1-imadizolylethyl)-1,3,5-triazine.isocyanuric acid adduct; silica; and carnauba wax.

- 14. (Original) The apparatus of claim 1, wherein the substrate mixture has a composition ratio of approximately:
 - 210 parts of methyl ethyl ketone;
 - 20 parts of digylcidyl Bisphenol-A;
 - 20 parts of tetrabromo Bisphenol-A;
 - 20 parts of ortho-cresol novolak epoxy resin (215 g/eq);
 - 15 parts of epoxy-terminated polybutadiene rubber;
 - 50 parts of brominated phenolic novolak resin;
- 4 parts of 2,4-diamino-6-(2-methyl-1-imadizolylethyl)-1,3,5-triazine.isocyanuric acid adduct:
 - 11 parts of silica (maximum particle size of 5 microns); and 1 part of carnauba wax.
- 15. (Original) The apparatus of claim 14, further comprising:

metal wiring deposited in embossed grooves of the embossable substrate mixture; one or more electronic chips coupled to the metal wiring, wherein the one or more electronic chips form a computer processor;

one or more external electrical connections coupled to the metal wiring;

- a memory operatively coupled to the processor;
- an input system and an output system operatively coupled to the processor;
- a power supply operatively coupled to the processor; and
- an enclosure holding the processor, the memory, the input system, the output system, and the power supply.

16. - 20. (Canceled)

21. (Original) An apparatus comprising:

a substrate base; and

means attached to the substrate base for providing an embossable surface with reduced adherence properties to an embossing tool.

- 22. (Original) The apparatus of claim 21, wherein the means for providing the embossable surface includes a polymer film having attached thereto means for releasing the embossing tool mixed with an epoxy resin.
- 23. (Original) The apparatus of claim 22, wherein the means for releasing the embossing tool comprises carnauba wax.
- 24. (Original) The apparatus of claim 23, wherein the means attached to the substrate base for providing the embossable surface is embossed, wherein the apparatus further comprises:

metal wiring deposited in embossed grooves of the embossable surface;

one or more electronic chips coupled to the metal wiring, wherein the one or more electronic chips form a computer processor;

one or more external electrical connections coupled to the metal wiring;

a memory operatively coupled to the processor;

an input system and an output system operatively coupled to the processor;

a power supply operatively coupled to the processor; and

an enclosure holding the processor, the memory, the input system, the output system, and the power supply.

25. - 28. (Canceled)